



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/536,345	09/29/95	TEMPLE	27754732937

JAMES P ZELLER
MARSHALL O'TOOLE GERSTEIN
MURRAY & BORUN 6300 SEARS TOWER
233 SOUTH WACKER DRIVE
CHICAGO IL 60606-6402

MM41/0413

EXAMINER
DALAKIS, M

ART UNIT
2851

DATE MAILED: 04/13/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
08/536,345

Applicant(s)
Temple et al.

Examiner
Michael Dalakis

Group Art Unit
2851



☒ Responsive to communication(s) filed on Jan 29, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 20-74 is/are pending in the application.

Of the above, claim(s) 20-33, 46-58, 65, 66, 70, 71, and 74 is/are withdrawn from consideration.

☒ Claim(s) 34-45 and 59-64 is/are allowed.

☒ Claim(s) 67-69, 72, and 73 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 2851

DETAILED ACTION

Continued Prosecution Application

1. The request filed on January 29, 1999 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 08/536,345 is acceptable and a CPA has been established. An action on the CPA follows.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 67-69 and 72-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Temple ('028) in view of Bartky et al. Temple teaches a high density multi-channel array, electrically pulsed droplet deposition apparatus comprising a plurality of modules each including a layer of piezo-material poled normal thereto, a channel for ink droplets, separating walls, electrodes, a channel closure sheet, a nozzle plate and means for supplying liquid to the channels. Bartky teaches a multi-channel array comprising a plurality of modules including a channel and separating wall wherein separating wall surface has an electrode which causes the wall to eject droplets upon shearing, a channel cover sheet having electrodes opposite the channel, drive circuits connected to electrodes, and a manifold. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Bartky into those of Temple, for the motivation, as suggested by Bartky, of providing an ink jet actuator having improved efficiency.

Allowable Subject Matter

4. Claims 34-45 and 59-64 are allowable over the prior art.

Art Unit: 2851

Response to Arguments


5. Applicant's arguments filed January 29, 1999 have been fully considered but they are not persuasive with respect to claims 67-69 and 72-73. The applicant argues that common to all the rejected claims is the feature of mechanical bonds between conductive tracks on a cover sheet and electrodes on channel-facing walls, which bonds seal the closure sheet to the channels. However, the examiner does not find this feature recited in claims 67-69 or 72-73. The applicant has not provided any additional arguments traversing the rejection of these claims. Therefore, the rejection is being maintained.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Dalakis at telephone number (703)305-3307. The examiner can normally be reached Monday through Thursday from 6:30 AM to 5:00 PM. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on (703)308-1436. The fax number for this Group is (703) 305-34[31,32]. Any inquiry of a general nature as to the status of this application should be directed to the Group receptionist at (703)308-1782.

✓
MD

April 12, 1999


Safet Metjahic
Supervisory Patent Examiner
Technology Center 2800